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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/964,852

09/28/2001

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004770.00024

2368

22907 7590 06/24/2009

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EXAMINER

BROWN, RUEBEN M

ART UNIT

PAPER NUMBER

2424

MAIL DATE

DELIVERY MODE

06/24/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/964,852	<b>Applicant(s)</b> TALMOLA ET AL.	
	<b>Examiner</b> REUBEN M. BROWN	<b>Art Unit</b> 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-18,20-33,36-39 and 41-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-18,20-33,36-39 and 41-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 3/5/2009, have been fully considered, but they are not persuasive. Applicant argues on page 12 that Yazolino does not teach the claimed feature of, 'receiving at the gateway a message indicating that the terminal no longer requires the first transmissions'. Examiner respectfully disagrees. Yazolino clearly teaches that when the control software 210 of the converter box 104 determines that an associated TV is either not turned on, or not tuned to the channel on which the converter box 104 is generating its output signal, then the converter sends a message to the headend controller. The message sent by the converter box 104 is either "No Vid" or "TV on Wrong Channel", both of which are messages that indicate to the instant headend controller that the programming that was being sent is no longer needed. Thus, the headend controller does not make subsequent transmission of the previously sent programming, which meets the claimed subject matter.

Yazolino provides an example of its operation (col. 11-col. 12). In particular, it is discussed that if the user was previously receiving a special services channel for receiving a menu, and later the converter box 104 does not detect the SyncLock \ signal from the instant TV receiver for a period of more than 1 second or if it is consistently detected less than 50% of the time, (which indicates that the program on the special services channel is not being received). As a result, the converter box 104 sends the "No Vid" messages to the headend controller or

alternatively the “TV on Wrong Channel” message is sent if the VideoDetectLock signals are received by the converter box 104, but the SyncLock signal is not valid. “Either way, **the controller at the headend of the system will receive a message indicating that the converter box no longer needs to receive a menu”**, emphasis added.

It is furthermore pointed out that in the Background of the Invention, that Yazolino discusses that the invention overcomes the problem of an inadvertent/random use of the remote control [that orders/selects a video program], while the TV is in fact turned Off, which avoids the unnecessary expense of the customer being charged for pay-per-view usage, when the video program is not needed, see col. 2, lines 1-14.

With respect to claim 43, on page 14 applicant argues that, “Hylton fails to disclose the features related to generating a wireless digitally modulated local broadband transmission by remultiplexing at least one first discrete service (de-multiplexed from a first one of a plurality of multiplexed streams) with at least one second discrete service (de-multiplexed from a second one of a plurality of multiplexed streams)”. It is pointed out (as previously discussed) that Hylton Fig. 7; col. 29, lines 47-65 thru col. 30, lines 1-10, discloses a detailed breakdown of the shared processing system 10. In particular, Fig. 7 of Hylton clearly shows that the Channel Selector 11 comprises a CATV RF tuner, Digital Receiver & Decryption Module, whereas the Program selector 13 comprises an MPEG Demux. Therefore, in Hylton, a plurality of streams are simultaneously received and demultiplexed, which reads on the claimed subject matter.

Furthermore, (Fig. 7; col. 30, lines 6-34) of Hylton clearly discloses that the MPEG Mux 13 multiplexes a plurality of programs for transmission on the wireless digitally modulated network, which also reads on the claimed subject matter. Specifically, Hylton states, “The MPEG multiplexor 15’ combines the packets for the video, audio, etc. for the four programs together with the PAT and program mapping tables...”. The channel selector 11, selects the particular requested channel, which means a plurality of channels are received. The program selector 13 selects the particular requested program, which means that a plurality of programs, i.e., plurality of discrete services, are received which reads on the claimed subject matter.

Therefore, Hylton also meets the language of claim 43, ‘...receiving first transmissions...including a plurality of multiplexed streams, wherein each multiplexed stream includes a plurality of discrete services...de-multiplexing a first one of the plurality of multiplexed streams...to obtain at least one first discrete service...de-multiplexing a second of the of the multiplexed stream...to obtain at least one second discrete service...generating...local broadband transmission...by re-multiplexing the at least one first discrete service with he at least one second discrete service’.

Applicant also appears to argue that since the claims recite that the, ‘the message indicating that the terminal no longer requires the first transmissions”, emphasis added, that somehow distinguishes over Yazolino. However, it is pointed out that in the combination of Hylton & Yazolino, whenever a terminal has ordered a movie or program that was received via

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the channel selector 11 & program selector 13, (i.e., the claimed first transmissions), then the message would indicate that that first transmissions is no longer needed.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-4, 10, 15-18, 20, 24, 27, 36-37, 39 & 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, (U.S. Pat # 5,708,961), in view of Knudson, (US PG-PUB 2005/0204387) and Yazolino, (U.S. Pat # 5,355,162).

Considering claims 1 & 10, the claimed method of distributing a data stream locally, comprising;

*'receiving at a gateway first transmission from a digital broadcast network by means of a gateway terminal'* is met by the shared processing system 10, in Hylton, Fig. 1, which receives video programming from a Digital Broadband Network 5.

*'processing'* and *'transmitting the first transmission via wireless digitally modulated local broadband'* is met by the discussion in Hylton that video programming is received from the Digital Broadband Network 5 and retransmitted within the user home wireless network, via a modulator 17, see col. 4, lines 55-67; col. 6, lines 19-44 & Fig. 1.

*'receiving the wireless digitally modulated broadband second transmission by at least one multimedia terminal'*, is met by the operation of the set top terminal 100, col. 7, lines 35-67 thru col. 8, lines 1-45.

The amended claimed feature wherein the processing, *'includes de-multiplexing a data stream of each of the transmission'*, Hylton discloses at least two embodiments of the shared processing system 10 that shows that the program selectors 13 are comprised of MPEG de-multiplexers or ATM de-multiplexers (Fig. 7; Fig. 9; col. 29, lines 60-67 thru col. 30, lines 1-29; col. 36, lines 55-60).

Regarding the claimed, *'re-multiplexing at least part of the data stream of the first transmissions with data stored locally'*, Hylton does not teach transmitting any locally stored content. However, Knudson provides a teaching of storing video content on a local media server 29, which can then be transmitted to local set top box(es), see Para [0072]. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Hylton with the feature of storing video content in local storage device, for distribution as taught by Knudson, at least for the advantage of avoiding the need to transmit the content over a wide area

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network, instead the video content would only need to be transmitted through the local area network to get to the requesting viewer.

As for the further claimed feature of; *'subsequent to 'transmitting, receiving at the gateway a message indicating that the terminal no longer requires the first transmission, and removing the first transmissions from subsequent transmission of the wireless digitally modulated local broadband second transmissions responsive to the message'*, Hylton nor Knudson provide such a detailed discussion of ending the transmission of a service. Nevertheless Yazolino, which is in the same field of endeavor of local distribution of video content, provides a teaching of the converter box 104 determining whether a special service that was being received from the head-end to a TV set 120, is still being received or if the TV set is still on, col. 9, lines 29-35. In the event that the TV set 120 has been turned-off or the TV set is not receiving the instant special service, then the converter box 104 send a message to the head-end indicating that the instant special service is not needed, which then causes a free-to-guest channel to be transmitted, see col. 10, lines 55-68; col. 11, lines 1-15; col. 12, lines 1-12.

The head-end of Yazolino corresponds with the shared processing system 10 of Hylton, and thus reads on the claimed *'gateway'*. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Hylton & Knudson, with the feature of indicating to a distribution controller that a service is no longer needed, which overcomes the problem of a random or inadvertent selection and transmission of a pay-per-view movie, even if the actual TV set is turned-off, as disclosed by Yazolino.



In the combination of Hylton & Yazolino, whenever a terminal has ordered a movie or program that was received via the channel selector 11 & program selector 13, (i.e., the claimed first transmissions), then the message would indicate that that first transmissions is no longer needed.

Considering claim 3, the secondary storage device of Knudson, meets the claimed subject matter.

Considering claims 4 & 37, the claimed subject matter is met by the combination of Hylton & Knudson.

Considering claim 15, the modulator 17 in Hylton, at least uses QAM, col. 6, lines 18-30.

Considering claim 16, Hylton teaches that two-way signaling uses the 902-928 MHz frequency band, col. 8, lines 18-34.

Considering claim 17, the claimed feature is broad enough to read on the discussion in Hylton that video programming and signaling uses frequency hopping techniques.

Considering claim 18, the claimed apparatus comprises elements that correspond with subject matter mentioned above in the rejection of claims 1 & 10, and is likewise treated. As for

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the additionally claimed '*memory*', the controller 19 of Hylton meets the claim, see col. 8, lines 45-67.

Considering claim 20, the claimed limitation is met by the combination of Hylton & Knudson, as discussed in claim 1.

Considering claim 24, the claimed subject matter reads on the disclosure of Knudson of receiving and storing programming locally, Para [0070-0073].

Considering claim 27, the claimed wireless link between the apparatus and the terminal, reads on the path utilized by the modulator 17 between the shared processing system 10 and the STT 100.

Considering claim 36, Hylton discloses technology supporting two-way wireless communication.

Considering claim 39, Hylton & Knudson are directed to transmission of video programming.

Considering claim 42, the shared processing system 10 of Hylton receives a plurality of multiplexed streams, which may comprise one or more programs, i.e., services. Since Hylton

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teaches that the multiplexor, multiplexes the requested streams after they have been de-multiplexed, the additionally claimed subject matter is also met.

4. Claims 5-6, 13-14, 22-23, 29, 31 & 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, Knudson & Yazolino, further in view of Candelore, (US PG-PUB 2002/0188567).

Considering claims 5-6, 13-14 & 22-23, Hylton does not discuss any aspects of scrambling video data. Nevertheless, Candelore discloses that scrambling is a technique used to restrict video programming to only authorized viewers. Regarding claim 6, Candelore goes on to teach that a video program may be broadcast through the air in scrambled form, then descrambled by the receiver 110 (descrambler unit 340) in order to be shown on display 160, and also re-scrambled by Re-Scrambler Unit 350, in order for storage in the Hard Disk Recording Unit 150, see Para [0041-0046]. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Hylton with the feature of re-scrambling a received video program, for the benefit of allowing the content provider greater control over its reproduction, as taught by Candelore, see Para [0009-0012], [0048].

Considering claim 29, the claimed apparatus comprises elements that correspond with subject matter mentioned above in the rejection of claims 1 & 5-6, and is likewise analyzed.

Considering claims 31 & 33, the claimed feature is met by the wireless link provided by the modulator 17 of Hylton.

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, Knudson, Yazolino & Candelore as applied to claim 6 above, and further in view of Garneau, (U.S. Pat # 5,675,647).

Considering claims 7-9, as for the additionally claimed feature of a password, Candelore teaches that a viewer needs to fulfill certain requirements in order to view scrambled content, such as timely purchase via various pay for view scenarios, Para [0059], but does not discuss the use of a password to additionally control access. Nevertheless, Garneau (col. 8, lines 15-55; col. 7, lines 49-62) teaches subscriber entering a password in the system in order to enable the video content to be de-scrambled at the authorized terminal of the user terminal. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Hylton & Candelore to use password protection, for the known purpose of preventing unauthorized users from access the subscriber's account, as taught by Garneau, col. 4, lines 44-64.

6. Claims 11-12, 21 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, Knudson & Yazolino, in view of Janik, (U.S. Pat# 7,107,605).

Considering claims 11-12, the claimed second transmission in a frequency allocated for free use, such as an ISM frequency, Hylton discloses that the modulator 17 may transmit the programming to terminals using channels that are the same or similar to a broadcast TV channel, col. 6, lines 18-35. However, Hylton does teach that the signaling messages between the set top terminals and the shared processing system 10 are transmitted in the one of the ISM bands, (902-928 MHz), see col. 8, lines 18-34; col. 19, lines 24-56 & col. 20, lines 1-30.

Hylton though, does not specifically disclose that the video data may be transmitted in one of the ISM bands. Nevertheless Janik, which is in the same field of endeavor, teaches a wireless home network alternatively operating in an ISM band (2.4 GHz), col. 1, lines 45-67 & col. 5, lines 8-31. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Hylton with the technology of alternatively transmitting the video programming in the ISM band, as disclosed by Janik at least for the known advantage of more easily avoiding interference in the other bands.

Considering claims 21, the claimed elements of a gateway terminal for receiving and transmitting data stream that correspond with the features presented in claim 1, are likewise treated. The additionally claimed feature of, 'the second transmission by a broadband digital

transmission at a frequency allocated to free use', corresponds with subject matter mentioned above in the rejection of claims 11-12, and is likewise treated.

Considering claims 28, the combination of Hylton & Janik (col. 5, lines 11-30; col. 6, lines 1-67) reads on the claimed subject matter.

7. Claims 25-26, 30 & 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, Knudson & Candelore and further in view of Janik.

Considering claim 25, the MPEG converter in Hylton is included within the set top terminal, col. 14, lines 55-67 thru col. 15, lines 1-30. However, as discussed in the rejection of claims 5-6, Candelore discloses descrambling, then re-scrambling a video program. The claimed MPEG A/D converter corresponds with the operation of the digital VCR 140 and hard disk recording unit 150 which is used to record analog or digital video, into digital format, Para [0030-0031]. However, Hylton does teach that the signaling messages between the set top terminals and the shared processing system 10 are transmitted in the one of the ISM bands, (902-928 MHz), see col. 8, lines 18-34; col. 19, lines 24-56 & col. 20, lines 1-30.

Hylton though, does not specifically disclose that the video data may be transmitted in one of the ISM bands. Nevertheless Janik, which is in the same field of endeavor, teaches a wireless home network alternatively operating in an ISM band (2.4 GHz), col. 1, lines 45-67 &

col. 5, lines 8-31. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Hylton with the technology of alternatively transmitting the video programming in the ISM band, as disclosed by Janik at least for the known advantage of more easily avoiding interference in the other bands.

Considering claim 26, Hylton discloses QAM modulation.

Considering claims 30 & 32, Hylton (Fig. 7; col. 29 & col. 30) & Janik (col. 1, lines 45-67 & col. 5, lines 8-31) disclose all subject matter.

8. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, Knudson, Yazolino & Candelore, as applied to claim 31 above, and further in view of Lett, (U.S. Pat # 5,539,822).

Considering claim 38, Hylton does not discuss any of the terminals also acting as an alarm. However Lett provides a teaching of using the subscriber terminal 14 as an alarm, col. 21, lines 65-67 thru col. 22, lines 1-12. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Hylton with the feature of an alarm, as taught by Lett, at least for the desirable of advantages of utilizing the computing power already available on the terminal of Hylton, and the its two-way communication system already set-up.

9. Claims 41 & 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, Knudson & Yazolino, further in view of Edson, (US PG-PUB 2003/0101459).

Considering claim 41, the previous discussion in claim 1 of Hylton, in view of Knudson reads on the claimed subject matter. However, as for the specifics of the *'one or more computer storage media storing computer readable instructions, that when executed by a processor causes'* the steps recited in claim 1 to be executed, the controller 19 of Hylton is the device that controls the shared processing system 10, see col. 8, lines 35-67; col. 9, lines 45-67 & col. 19, lines 51-67. However, even though Hylton teaches that the controller provides instruction to the various devices, the reference does not explicitly show the controller 19 supplying these commands or instructions to the various devices from a storage medium. Nevertheless, Edson is in the same field of endeavor and discloses that the gateway 13 includes CPU 105 with associated hard disk 107 for storing programming 109 & data 111. Similar to the controller 19 of Hylton, the CPU 105 of Edson controls all of the operations of the gateway. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Hylton with the feature of computer readable medium for storing instructions, to be accessed by the processor, as taught by Edson, at least for the benefit of being able to more efficiently operate the system, since the instructions would be retrieved from memory, when needed.

Considering claim 43, the claimed apparatus corresponds with subject matter mentioned above in the rejection of claims 1 & 42, and is likewise treated. As for the claimed *'memory having stored thereon computer readable instruction that when executed cause the processor to*



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*perform...*’, as discussed above with respect to claim 41, this feature is found in Edson and is likewise treated.

As for the claimed, ‘...receiving first transmissions...including a plurality of multiplexed streams, wherein each multiplexed stream includes a plurality of discrete services...de-multiplexing a first one of the plurality of multiplexed streams...to obtain at least one first discrete service...de-multiplexing a second of the of the multiplexed stream...to obtain at least one second discrete service...generating...local broadband transmission...by re-multiplexing the at least one first discrete service with he at least one second discrete service’. The channel selector 11, selects the particular requested channel, which means a plurality of channels are received, from which, one is selected. The program selector 13 selects the particular requested program, which means that a plurality of programs, i.e., plurality of discrete services, are received, from which one is selected, which reads on the claimed subject matter. Therefore, Hylton also meets the language of claim 43.

Considering claims 44-45, Hylton teaches that the user makes a request for a specific program, i.e., service, such that the request is transmitted upstream the system 10. Thus the selection of the requested program, and its transmission to the set top 100 reads on the claimed subject matter, col. 5, lines 60-67 thru col. 6, lines 1-20 & col. 30, lines 45-67.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**Any response to this action should be mailed to:**

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to REUBEN M. BROWN whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Christopher Kelley/

Supervisory Patent Examiner, Art Unit 2424